WIRELESS COMMUNICATION TERMINAL HAVING A VIDEO IMAGE CAPABILITY

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. Pat. No. 6,192,257, entitled "A Wireless Terminal Having Video Image Capability".

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a portable wireless communication terminal having the capability to receive and transmit both video and audio signals. The communication terminal is housed in a small portable handheld unit, which includes a small video camera, a video display, and other conventional mobile telephone features. The handheld unit has extendable and configurable consoles so that the camera and video display can be selectively arranged to best convenience the user. Further, the handheld unit is lightweight, compact, easy to store, drop-tolerant, and rugged.

2. Description of Related Art

Cellular phones have become an indispensable form of communication in today's society. Many businesses rely upon this wireless technology to keep in constant communication with employees outside the office. Also, cellular phones are a great convenience to our personal lives. To this end, there exists an ever-growing need to improve both the services offered by, and features of, a cellular phone.

By the Applicants' prior U.S. application, Ser. No. 08/649,554, there is disclosed a portable, wireless communication terminal having advanced features relating to video signal processing. Particularly, the communication terminal has a video camera and video display. The communication terminal's features enable a user to send and receive video images while simultaneously receiving and sending audio signals.

SUMMARY OF THE INVENTION

The present invention relates to a housing for the portable wireless communication terminal disclosed in Applicants' U.S. Pat. No. 6,192,257.

It is an object of the present invention to provide a communication terminal wherein the electronics of the communication terminal are housed in consoles, which are interconnected so that they may be extended, rotated, and/or reconfigured relative to each other at the convenience of a user.

Another object of the present invention is to provide a communication terminal having a camera console which can be rotated relative to a video display console so that the user can transmit a video signal of his surroundings while watching the video display.

Yet another object of the present invention is to provide a communication terminal having a video display console which can be extended and tilted relative to a base console. This adjustment feature allows the user to hold the communication terminal adjacent to his head during use. Alternatively, the user can place the communication terminal on a surface for convenient hands-free operation.

These and other objects of the present invention are fulfilled by providing a portable wireless communication terminal comprising: a camera console; a camera mounted in said camera console; a video display console; a video display mounted in said video display console; and a base console, wherein said camera console, video display console, and base console are interconnected and said camera console is movable relative to said video display console.

Moreover, these and other objects of the present invention are fulfilled by providing a portable wireless communication terminal comprising: a camera console; a camera mounted in said camera console; a video display console; a video display mounted in said video console; and a base console, wherein said camera console, video display console, and base console are interconnected and said video display console is movable relative to said base console.

Furthermore, these and other objects are fulfilled by a providing a portable wireless communication terminal comprising: a camera console; a camera mounted in said camera console; a video display console; a video display mounted in said video console; and a base console, wherein said camera console, video display console, and base console are interconnected, said camera console is movable relative to said video display console, and said video display console is movable relative to said base console.

Further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become more fully understood from the detailed description given hereinbelow and the accompanying drawings which are given by way of illustration only, and thus are not limitative of the present invention, and wherein:

FIG. **1** is a front perspective view illustrating a portable, wireless, communication terminal, in accordance with the present invention;

FIG. **2** is a side view of the communication terminal of FIG. **1** illustrating a camera console, a video display console and a base console;

FIG. **3** is a close-up perspective view illustrating a guide connecting the camera console and the video display console;

FIG. **4** is a close-up perspective view illustrating a threaded member connecting the camera console and the video display console;

FIG. **5** is a front view illustrating the video display console in a remote position relative to the base console;

FIG. **6** is a front view illustrating a scissors linkage between the video display console and the base console;

FIG. **7** is a side view illustrating the video display console in the remote position and tilted relative to the base console;

FIG. **8** is a side view illustrating the video display console overlaying the base console;

FIG. **9** is a front view of a first alternative embodiment of the communication terminal, wherein the arrangement of the consoles has been modified;

FIG. **10** is an overhead view of the first alternative embodiment during use;

FIG. **11** is a front view of a second alternative embodiment of the communication terminal, wherein the video